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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,630

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Qiang Wu

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EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2619

NOTIFICATION DATE

DELIVERY MODE

12/27/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/712,630

Applicant(s)

WU ET AL.

Examiner

Blanche Wong

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed October 8, 2007 have been fully considered but they are not persuasive.
2. Applicant states "[t]he cited reference does not teach or suggest all of the subject matter in these claims. For example, new claim 5 ..." Response to Office Action, p.8, para. 2. Applicant did not explain why the cited reference does not teach or suggest so or which part of the claim language was not taught or suggested by the cited reference with respect to claim 1 or 5, or both.
3. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.
4. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.
5. Examiner notes that the objections to the Specification and Drawings have not been addressed in the previous Office Action.

### ***Specification***

6. The abstract of the disclosure is objected to because it is unclear from the abstract what is the invention. Contributing to the unclear nature of the abstract, for example, the

abstract uses abbreviation that was undefined in the abstract. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an access terminal comprising: a signal level estimator, a comparator to determine the differences between a plurality of signal levels received from a plurality of active sectors and a signal level of a current serving sector, a comparator for receiving adjusted signal levels to determine differences, an accumulator, and a new sector identification module (claim 1); a best sector identifier (claim 2); an RPC filter (claim 4); and a delta generator (claim 5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### ***Claim Objections***

8. Claim 9 is objected to because of the following informalities: With regard to claim 9, Examiner suggests replacing "said variable rate signal" in line 2 with "said variable rate signal level" in consistent with the "variable rate signal level" in claim 6, line 2.. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to

which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. **Claims 1-4** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With regard to claim 1, it is unclear what is the structure of the access terminal and how the individual components, namely a signal level estimator, the two comparators, an accumulator, and a new sector identification module, are combined. That is, the claim language recites the function of each component. However, the claim language does not recite how each component comes together in the access terminal. For example, the new sector identification module receives the accumulated total credits, but claim language does not indicate the accumulator for accumulating total credits generates some output or the new sector identification module operatively connects to the accumulator.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 1-11** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, it is unclear whether the comparators in lines 5 and 7 are the same ones.

With regard to claim 1, it is unclear whether the "adjusted signal levels" in line 7 are the same as the "adjusted fixed rate signal level for all sectors" in line 4.

With regard to claim 1, it is unclear whether "differences" in line 7 are the many differences between any two adjusted fixed rate signal levels.

With regard to claim 1, it is unclear what are the "candidate sectors" in line 12.

With regard to claim 5, it is unclear what is meant by "delta credit" in line 5.

With regard to claim 8, it is unclear what is meant by "authorizing" in line 2.

With regard to claim 9, it is unclear what is DRC in line 2.

13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, line 7, "adjusted signal levels".

Claim 1, line 9, "total credits".

Claim 1, line 10, "the accumulated total credits".

Claim 1, line 12, "the best serving sector".

Claim 5, line 9, "said best serving sector".

### ***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claims 1-3 and 5-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Ganesh et al. (U.S. Pat No. 6,360,098).

With regard to claim 1, Ganesh discloses

a signal level estimator (**mobile station 32, col. 5, line 44**) to deduct an offset value (**a phase reference, col. 5, line 48**) from a fixed rate signal level (**reference**) of the current serving sector to generate an adjusted fixed rate signal level for all sectors (**signal strength is adjusted at hand off**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**);

a comparator (**mobile station 32, col. 5, line 44**) to determine differences between a plurality of signal levels (**signal strength comparisons**) received from a plurality of active sectors (**base stations**) and a signal level of a current serving sector (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**);

a comparator (**mobile station 32, col. 5, line 44**) for receiving adjusted signal levels to determine differences (**signal strengths are received before comparisons are made**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**);

an accumulator (**mobile station 32, col. 5, line 44**) for accumulating total credits (**signal strengths are collected/accumulated before comparisons are made**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**); and

a new sector identification module (**sector servers 28, col. 6, line 37**) to receive (**reports to**) the accumulated total credits (**signal strengths**) ("**the mobile station measures and reports to a sector server the [signal] strengths ...**", col. 6, lines 43-44) and to select the sector with the best serving sector (**hand off**) ("**signal strength comparisons between base stations for determining when to hand off**", col. 5, lines 49-50) among a pool of candidate sectors (**optimum list**) (**a neighbor list representing an "optimum" list for each sector, col. 6, line 54**) based on the accumulated total credits (**signal strengths**).

With regard to claim 2, Ganesh further discloses a best sector identifier (**determining when to hand off**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**).

With regard to claim 3, Ganesh further discloses variable rate (**variable rate, col. 1, line 33**).

With regard to claim 5, Ganesh discloses  
a comparator (**mobile station 32, col. 5, line 44**) comparing a plurality of signal levels (**signal strengths**) ("**the mobile station measures and reports to a sector server the [signal] strengths ...**", col. 6, lines 43-44) received from a plurality of active sectors with a signal level of a current serving sector (**a phase reference, col. 5, line 48**) to



produce a difference **(comparison) (signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50);**

delta generator **(sector servers 28, col. 6, line 37)**, coupled to the comparator, for generating a delta credit for each of said plurality of active sectors **(optimum list) (a neighbor list representing an “optimum” list for each sector, col. 6, line 54)** based on said difference;

an accumulator **(mobile station 32, col. 5, line 44)**, coupled to the delta generator, for accumulating a plurality of delta credits to produce an accumulated total credit **(signal strengths are collected/accumulated before comparisons are made) (signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50); and**

a best sector identifier **(sector servers 28, col. 6, line 37)**, coupled to the accumulator, for identifying a best serving sector **(optimum list) (a neighbor list representing an “optimum” list for each sector, col. 6, line 54)** from said accumulated total credit **(comparison)**.

With regard to claim 6, Ganesh further discloses said plurality of signal levels received from said plurality of active sectors comprises a fixed rate signal level **(a phase reference, col. 5, line 48)** and a variable rate signal level **(variable rate, col. 1, line 33)**.

With regard to claim 7, Ganesh further discloses an adjustment module **(mobile station 32, col. 5, line 44)** for adjusting said fixed rate signal level to produce an adjusted

fixed rate signal level (**signal strength is adjusted at hand off**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**).

With regard to claim 8, Ganesh further discloses an authorization module (**mobile station 32, col. 5, line 44**) for authorizing said plurality of delta credits (**signal strengths**) ("**the mobile station measures and reports to a sector server the [signal] strengths ...**", col. 6, lines 43-44).

#### ***Allowable Subject Matter***

16. Claims 4 and 9-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*BW*

BW  
December 10, 2007

EDAN . ORGAD  
SUPERVISORY PATENT EXAMINER

*Edan Orgad*